

**§ 181.30 Substances used in the manufacture of paper and paperboard products used in food packaging.**

Substances used in the manufacture of paper and paperboard products used in food packaging shall include:

Aliphatic polyoxyethylene ethers.\*  
 1-Alkyl (C<sub>6</sub>-C<sub>18</sub>)3-amino-3-aminopropane monoacetate.\*  
 Borax or boric acid for use in adhesives, sizes, and coatings.\*  
 Butadiene-styrene copolymer.  
 Chromium complex of perfluoro-octane sulfonyl glycine for use on paper and paperboard which is waxed.\*  
 Disodium cyanodithioimidocarbamate with ethylene diamine and potassium *N*-methyl dithiocarbamate and/or sodium 2-mercaptobenzothiazole (slimicides).\*  
 Ethyl acrylate and methyl methacrylate copolymers of itaconic acid or methacrylic acid for use only on paper and paperboard which is waxed.\*  
 Hexamethylene tetramine as a setting agent for protein, including casein.\*  
 1-(2-Hydroxyethyl)-1-(4-chlorobutyl)-2-alkyl (C<sub>6</sub>-C<sub>17</sub>) imidazolium chloride.\*  
 Itaconic acid (polymerized).  
 Melamine formaldehyde polymer.  
 Methyl acrylate (polymerized).  
 Methyl ethers of mono-, di-, and tripropylene glycol.\*  
 Myristo chromic chloride complex.  
 Nitrocellulose.  
 Polyethylene glycol 400.  
 Polyvinyl acetate.  
 Potassium pentachlorophenate as a slime control agent.\*  
 Potassium trichlorophenate as a slime control agent.\*  
 Resins from high and low viscosity polyvinyl alcohol for fatty foods only.  
 Rubber hydrochloride.  
 Sodium pentachlorophenate as a slime control agent.\*  
 Sodium-trichlorophenate as a slime control agent.\*  
 Stearato-chromic chloride complex.  
 Titanium dioxide.\*  
 Urea formaldehyde polymer.  
 Vinylidene chlorides (polymerized).

**§ 181.32 Acrylonitrile copolymers and resins.**

(a) Acrylonitrile copolymers and resins listed in this section, containing less than 30 percent acrylonitrile and complying with the requirements of

paragraph (b) of this section, may be safely used as follows:

(1) *Films.* (i) Acrylonitrile/butadiene/styrene copolymers—no restrictions.

(ii) Acrylonitrile/butadiene copolymers—no restrictions.

(iii) Acrylonitrile/butadiene copolymer blended with vinyl chloride-vinyl acetate (optional at level up to 5 percent by weight of the vinyl chloride resin)—for use only in contact with oleomargarine.

(iv) Acrylonitrile/styrene copolymer—no restrictions.

(2) *Coatings.* (i) Acrylonitrile/butadiene copolymer blended with polyvinyl chloride resins—for use only on paper and paperboard in contact with meats and lard.

(ii) Polyvinyl chloride resin blended with either acrylonitrile/butadiene copolymer or acrylonitrile/butadiene styrene copolymer mixed with neoprene, for use as components of conveyor belts to be used with fresh fruits, vegetables, and fish.

(iii) Acrylonitrile/butadiene/styrene copolymer—no restrictions.

(iv) Acrylonitrile/styrene copolymer—no restrictions.

(3) *Rigid and semirigid containers.* (i) Acrylonitrile/butadiene/styrene copolymer—for use only as piping for handling food products and for repeated-use articles intended to contact food.

(ii) Acrylonitrile/styrene resin—no restrictions.

(iii) Acrylonitrile/butadiene copolymer blended with polyvinyl chloride resin—for use only as extruded pipe.

(b) Limitations for acrylonitrile monomer extraction for finished food-contact articles, determined by using the method of analysis titled "Gas-Solid Chromatographic Procedure for Determining Acrylonitrile Monomer in Acrylonitrile-Containing Polymers and Food-Simulating Solvents," which is incorporated by reference. Copies are available from the Center for Food Safety and Applied Nutrition (HFS-200), Food and Drug Administration, 5100 Paint Branch Pkwy., College Park, MD 20740, or available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: [http://www.archives.gov/federal\\_register/](http://www.archives.gov/federal_register/)

\*Under the conditions of normal use, these substances would not reasonably be expected to migrate to food, based on available scientific information and data.